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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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05/23/2001

Luc Attimont

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7590

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EXAMINER

FERGUSON, KEITH

ART UNIT

PAPER NUMBER

2683

6

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/862,600

Applicant(s)

ATTIMONT ET AL.

Examiner

Keith T. Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parkkila in view of Yoshida.

Regarding claim 1, Parkkila discloses a method (fig. 3) of connecting to a radiocommunication network (fig. 1) a terminal (mobile station) which is in a standby mode (idle mode) because of temporary unavailability (loss of service) of the signal from the network (claim 1 lines 23-33 and col. 7 lines 35-67), said method comprising: periodically scanning (i.e. the mobile station regularly looks to determine if there is a better cell in the

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term of reselection criteria by performing a measurement procedure) (col. 6 lines 56-67, col. 7 lines 15-34 and claim 1 lines 27-55) frequencies of said radiocommunication network using one sequences (i.e. a measurement procedures on BCCH carriers that were included in the last BCCH carrier allocation received from the network) (col. 7 lines 48-53) each associated with a predetermined list (neighboring list or BA) (col. 7 lines 21-23, col. 7 lines 48-53, claim 1 lines 35-46 and claim 3 lines 64-67) of frequencies (carriers) from all said frequencies (carriers) (col. 7 lines 21-23, col. 7 lines 48-53, claim 1 lines 35-46 and claim 3 lines 64-67). Parkkila differs from claim 1 of the present invention in that it does not explicit disclose periodically scanning frequencies of said radiocommunication network, when signal intensity was constant before said standby. Yoshida teaches a mobile station that scans channels during the idle state (col. 1 lines 48-51) and selects the one channel having the highest signal strength (col. 1 lines 48-51). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made for Parkkila to periodically scanning frequencies of said radiocommunication network, when signal intensity was constant before said standby in order for the mobile station to quickly select a carrier after a loss of service, which saves time scanning for a channel

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and saves the battery life of the mobile station, as taught by Yoshida.

Regarding claim 4, Parkkila discloses storing the last frequencies (i.e. cell data containing a list of channels received from a cell of select networks before loss of service) available before disconnection (loss of service) from the network (claim 8 lines 28-44 and claim 10 lines 65-67) so that the first scanning sequence scans (reselection measurements on a received signal that has risen above a threshold level) said last available frequencies (i.e. reselection measurements on last BCCH carriers before lost of service, service may be re-established with said network) (col. 7 line 49 through col. 8 line 8 and claim 8 lines 46-56).

Regarding claim 5, Parkkila discloses measuring the intensity (BCCH carrier strength) of the last available frequencies (BCCH carriers before loss of service) of the signal before disconnection (loss of service) from the network (col. 7 lines 25-35).

Regarding claim 6, Parkkila discloses frequency scanning (reselection measurements performed in step 304) is partial (only

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if channel is found in last BCCH has risen above a predetermined threshold) (col. 10 lines 28-56) only if the intensity (carrier strength) of the last frequencies (last BCCH) available exceeds a predetermined threshold value (within a path loss threshold value C1 or above a predetermined threshold) (col. 7 lines 30-67 and col. 10 lines 28-56).

4. Claims 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klas et al. in view of Yamada et al..

Regarding claim 9, Klas et al. discloses a terminal (user terminal) adapted to be connected to one or more radiocommunication networks (CDMA network or AMPs network) (fig. 6 and col. 9 line 39 through col. 10 line 61) operating on different frequencies (different channels) (col. 9 lines 47-55), said terminal (user terminal) comprising: a processor (means) for partially scanning the frequencies (CDMA channels) of the network using one or more sequences (i.e. partial search of previous acquired CDMA channels or partial search of specified CDMA channels) (col. 10 lines 30-61) each of which is associated with a predetermined list (specified list) of frequencies selected from all said frequencies (col. 10 lines 30-61). Klas et al. differs from claim 9 of the present invention in that it does not explicit disclose means for determining what type of scanning to perform base on signal intensity. Yamada et al. teaches a PCS handset which goes into an automatic mode selection (means) which consist of a Initial Cache Scan or Full scan based on the type of wireless system and the received RSSI (intensity) from the wireless system (col. 12 line 35 through col. 14 line 42). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Klas et al. with means for determining what type of scanning to perform base on signal intensity in order for the mobile terminal to determine if its in the CDMA network or Amps network based upon the type of scanning needed for rapid communication with the network, as taught by Yamada et al.

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Regarding claim 10, Klas et al. means (processor) for selecting (i.e. decides to perform) partial scanning of the various frequencies (CDMA channels) (col. 10 lines 30-40).

Regarding claims 11-14, Klas et al. discloses a terminal (user terminal) adapted to be connected to one or more radiocommunication networks as discussed supra in claim 9 above. Klas et al. differs from claims 11-14 in that it does not explicit disclose whether the intensity of the signal before standby was constant; partial scanning means perform scanning using sequences with a predetermined list of frequencies, means for scanning all said frequencies when the intensity of the signal before the standby was varying; wherein when the signal intensity was varying before standby, scanning all the frequencies of the radiocommunication network. Yamada et al. teaches the intensity (rssi) of the signal before standby (not registered) was constant (col. 13 lines 35-52); partial scanning (Initial Cache scan) means perform scanning using sequences with a predetermined list of frequencies (col. 13 lines 35-67), means for scanning all said frequencies when the intensity of the signal before the standby was varying (col. 13 line 67 through col. 14 line 6); wherein when the signal intensity was varying before standby (col. 14 lines 6-42), scanning all the frequencies of the radiocommunication network (col. 13 line 67 through col. 14 line 42). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Klas et al. with whether the intensity of the signal before standby was constant; partial scanning means perform scanning using sequences with a predetermined list of frequencies, means for scanning all said frequencies when the intensity of the signal before the standby was varying; wherein when the signal intensity was varying before standby, scanning all the frequencies of the radiocommunication network in order for the mobile terminal to know what system it is in before it loses connection with the network by performing a particular scanning technique, as taught by Yamada et al..

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5. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parkkila in view of Yoshida as applied to claim 1 above and in further view of Kallin et al..

Regarding claims 2 and 3, the combination of Parkkila and Yoshida differs from claims 2 and 3 of the present invention in that they do not explicit disclose said list of frequencies associated with each sequence does not vary and said list of frequencies associated with each sequence varies. Kallin et al. teaches said list of frequencies associated with each sequence does not vary (fixed) (col. 4 lines 35-38) and said list of frequencies associated with each sequence varies (i.e. frequencies learned based upon current environment) (col. 4 lines 35-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Parkkila and Yoshida with said list of frequencies associated with each sequence does not vary and said list of frequencies associated with each sequence varies in order for the mobile station to rapidly select the best received signal after a loss of service by using the frequencies within the neighboring list which are fixed presented by the cell the mobile station is camped on or learned by the mobile station which replaces the frequencies within the neighboring list with frequencies that are stronger carriers for service which saves

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the mobile station time and energy when scanning for a better cell for service, as taught by Kallin et al..

6. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parkkila in view of Yoshida as applied to claims 1,4 and 5 above and in further view of Bamburak et al..

Regarding claim 7, the combination of Parkkila and Yoshida differs from claim 7 of the present invention in that they do not explicit disclose determining the number of last frequencies available before disconnection from the network carrying a signal of intensity greater than a predetermined threshold value.

Bamburak et al. teaches determining the number of last frequencies available (i.e. a last frequency band of a last service provider) (col. 5 lines 7-9 and claim 1 lines 15-17) before disconnection (powering down) from the network (col. 7 lines 7-9), the service providers provides frequency bands across a spectrum which carry their service operator code (SOC) or system identification code (SID) which the communication device locks onto of the last service provider SOC or SID which is stored within the communication device memory (col. 4 line 63 through col. 5 line 19) that carries a signal of intensity greater than a predetermined threshold value (inherent, as the frequency band of the last service provider that is the signal

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received and examined to be within or above a threshold which the communication device lock onto is the optimal service provider for connection, as taught in col. 4 lines 6-9, col. 5 lines 9-19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Parkkila and Yoshida with determining the number of last frequencies available before disconnection from the network carrying a signal of intensity greater than a predetermined threshold value in order for the mobile station not to do a full search of frequencies after a loss of service which saves time when locating a signal for connection and saves battery energy within the mobile station, as taught by Bamburak et al..

Regarding claim 8, the combination of Parkkila and Yoshida Parkkila differs from claim 8 of the present invention in that it does not explicit disclose the frequency scanning is partial only if said number of last frequencies available carrying a signal of intensity greater than a predetermined threshold intensity is itself greater than a given number. Bamburak et al. teaches the frequency scanning is partial (inherent, when the communication device power up and detects if the last frequency band used has a more preferred service provider or is

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the optimal service provider and selects the last service provider, thereby not completing a full scan, as taught in claim 1 lines 15-17 and col. 5 lines 7-19) only if said number of last frequencies (last frequency band of the last service provider) (claim 1 lines 15-17) available carrying a signal of intensity greater than a predetermined threshold intensity is itself greater than a given number (inherent, as the frequency band of the last service provider that is the signal received and examined to be within or above a threshold which the communication device lock onto is the optimal service provider is itself for connection, as taught in col. 4 lines 6-9, col. 5 lines 9-19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Parkkila and Yoshida with the frequency scanning is partial only if said number of last frequencies available carrying a signal of intensity greater than a predetermined threshold intensity is itself greater than a given number in order for the mobile station to shorten its frequency scanning time by not completing a frequency scan of neighboring cells within a list of neighboring frequencies which saves the time locating a channel and saves the battery of the mobile station, as taught by Bamburak et al..

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith T. Ferguson whose telephone number is (703) 305-4888. The examiner can normally be reached on 6:30am-5:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be

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reached on (703) 308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Keith Ferguson
Art Unit 2683
April 21, 2004



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